

## Profitability Analysis of the Banking Sector in Republic of Macedonia

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**Abstract:** The banks are important financial institutions in the financial system and the economy. Establishing a stable and contemporary system is a basic precondition for establishing a healthy and dynamic economic development of a country, and it is a base for financing the dynamics of the economic prosperity. That is especially important in countries such as our country, with an undeveloped capital market where the banks are main carriers and sources of investments which will help the economic development and create a possibility for the best transformation of savings into productive investments indispensable for initiation and support of the economic development.

In the contemporary conditions for economy, the banks manage the economic processes, where they participate actively and directly in finding out optimal solutions for the capital accumulation and use.

In the situation of fast changes of the business environment, and the increasing market competitiveness, the banks' policy which should be directed towards higher profitability, is more highlighted.

The main objective of this paper is to examine the profitability of the banking sector in Republic of Macedonia. As proxy for banks profitability we consider the return on average assets (ROAA), the return on average equity (ROAE) and Net Interest Margin (NIM). This paper uses a descriptive financial ratio analysis to measure, describe and analyse the performance of commercial banks in Macedonia during the analyzed period.

**Keywords** - bank profitability, Return of Assets, Return of Equity, Net Interest Margin

### 1. Introduction

The financial system is very important for the economic development of each national economy. Namely, the financial system transforms the savings into productive investments, and in this way, it accelerates the country economic development.

The banking institutes are the core of the financial system. Without these banks, many countries would not be as developed as they actually are. Nevertheless, the role of commercial banks and their importance depends on the political, social and economical system of the country. In some countries, commercial banks are a key factor to the development of economy, while in other countries, their role is less visible.<sup>1</sup>

Their key role is to mediate into the process of connecting and transferring the financial resources between the excessive and deficit sectors (population, economy, public sector). The banks, by mediation of the financial markets, connects the offering and demand for financial resources and

make transfer in the most effective way. They transform the investors' role, i.e. their assets, into sources of their working means, and direct them directly to the corporative sector. Due to those reasons, the banking system in each country has an irreplaceable role in providing financial resources to the private sector, in order to support the economic development. Therefore, the improvement of the total banking system effectiveness is of a huge importance for the development of each country.

Namely, the success of the banks working creates possibilities for more efficient (cheaper) crediting of the economic entities, which results in an increased potential for investing of the enterprises and encouraging the personal people's spending.

### 2. Institutional set-up of the banking sector in R. Macedonia

The banking system is the most important part of the total financial system in R. Macedonia, because 86.8% of the total financial system assets belong to

<sup>1</sup> Measuring Commercial Performance Banks using Financial Ratios Case of Albanian Banking System (2005-2014) Ermela Kripa Marinela Seitaj, *The 3rd International*

*Virtual Conference on Advanced Scientific Results* May, 25. - 29. 2015

the banks. The banking system in R. Macedonia is regulated according to the European standards and it features a continued trend of the banks' net profit growth, increase of credits demands both by the corporative sector and the sector of population, high interest margin and liberalized access for the foreign investors.

The banking sector in R. Macedonia consists of 15 banks and 3 savings banks. 11 of the banks are mainly in the ownership of foreign shareholders, while 7 are subsidiaries of foreign banks. Depending on the total assets volume, the banks are grouped into three groups, i.e. big, medium and small banks.

The largest part of the total assets (67%) is concentrated in the four big banks, that indicates high concentration of the banking system in R. Macedonia. The high concentration sets apart several banks that have systematic importance, which realizations have crucial role for the total banking system and domestic economy.

The Macedonian banks are mainly owned by a private capital, especially the big and medium banks. The foreign capital in the banking sector is of special importance. Of the total number of banks in R. Macedonia, 13 banks are owned by foreign shareholders, of which 7 are owned by foreign banks. I.e., the foreign capital share into the total banking system capital in R. Macedonia is 74,8% [2]. The constant increase of the foreign capital share in the Macedonian banks, is a result of the foreign portfolio investors' interest in trading with their shares, and their interest in participating in this profitable sector.

The stability of the banking system in R. Macedonia is kept on a relatively stable level, with a continuous increasing of the credits approved to non-financial persons. The favorable movements in the domestic credit market are especially evident in the segment of the banks' corporative clients, and at the same time, the credit support for the households, which annual growth has been accelerated in the last two years. The increased credit growth has been appropriately supported by the deposits, that see two-digits annual growth rate. The risks have become important for the banks' working. The credit risk is predominant, while the risks relating to changes in the market

variables, have remained low. The credit portfolio quality has remained almost unchanged, with the participation of the non-functional ones into the total credits of the non-financial sector of 11,3%. The non-functional credits growth on an annual base sees deceleration, that comes out from twice lower annual growth of the non-functional credits of the enterprises. The risks of the non-functional credits for the banks' solvency have been minimized, having in mind their high coverage by the adjusted value, which limits the possible negative effects on the banks' capital positions. Furthermore, the total credit exposure to non-financial persons features high coverage by security instruments, which decreases the rate of the expected losses from the credit exposure.

The capital adequacy is almost twice higher than the minimum recommended by the law and it is 15,7%. The profit is the main source for strengthening the banks' capital position, which highlights the profitability importance, not only for the banking system stability, but also for increasing the banks activities. We see continual improvement of the banking system profitability, mainly due to expenditures for interest rates decreasing, but spending efficiency is also improved, due to the decrease of operating expenses, after a longer period. In this situation of continuous decreasing of deposits interest rates, which is generally a driver for improved profitability of the banks, but as well for an existence of a risk for gradual exhausting of the space for continuing this trend, the banks are faced with a challenge for maintaining the profitability.<sup>2</sup>

Moreover, the main challenge for the banks in the coming period, refers to maintaining optimal credit support to the non-financial sector and at the same time, decreasing of the credit channel damages, which would have return effects on the profitability, capital stability and liquidity of the banks.

### **3. Analysis of the banking sector in R. Macedonia profitability in the period from 2007 to 2016**

The profit is a reason for existence of each commercial organization. The profit rate and volume are considered as indicators of the

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<sup>2</sup> Financial Stability Report for the Republic of Macedonia, National Bank of the Republic of Macedonia, 2016

efficiency in using the banks' resources. The profitability also indicates the capacity for the banking institutions earning. It highlights the bank management competency. Namely, the profitability is the most important and valid indicator, because it gives comprehensive picture of the bank's ability to generate higher incomes.<sup>3</sup>

Profits affect bank's cost of raising capital in both ways, as a direct contributor to equity financing and as indicator for external investors' assessment of the financial strength of the bank. Moreover, even if solvency is high, poor profitability weakens the bank's capacity to absorb negative shocks, which will eventually affect solvency.<sup>4</sup> Overall, healthy and sustainable profitability is vital in maintaining the stability of the banking system and contributes to the state of the financial system (Gottard et al, 2004).<sup>5</sup>

In the literature, profitability of banks is generally measured by return on asset (ROA), return on equity (ROE) and net interest margin (NIM).<sup>6</sup>

Having in mind the bank's final aim – maximizing the shareholders' wealth, it is clear that the key item in the analysis of the bank's profitability is the Return of Equity (ROE). This indicator shows the return rate that the shareholders have realized on the invested capital in the bank.<sup>7</sup> The Return of Equity is calculated as a relation between the net profit and the bank's capital.

Many researchers claims that as ROA tend to be lower for financial intermediaries, most banks heavily utilized financial leverage to increase their ROE to competitive levels.<sup>8</sup>

Return of Assets (ROA) is the second of the two most important indicators of the bank's

profitability. Return on assets (ROA) is the ratio of Net Income after Taxes divided by Total Assets. Bank profitability is best measured by ROA, because it is not distorted by high equity multipliers and represents better measure of the ability of a firm to generate returns on its portfolio of assets<sup>9</sup> (Kosmidou, 2008; Naceur & Goaid, 2008). The ROA signifies managerial efficiency in other words it depicts how effective and efficient the management of banks has been as they seek to transform assets into earnings. And the higher ratio indicates the higher performance of the banks. It is a useful tool for comparing profitability of one bank with other or the whole commercial banking system.

Net Interest Margin (NIM) shows the net return interest realized by the bank on the available resources. It is calculated as a relation between net-interest revenues and total assets. NIM is a very important profitability indicator, but it is also an indicator of the working efficiency. This variable is determined by the bank management ability to realize appropriate return of assets, and to provide cheaper financing sources. In that context, NIM is focused on the earned profit of the interest activities. Its importance comes out of the fact that the interest revenues and expenditures are the two basic categories in the bank's profit and loss account.

The following graphs show the profitability of the banking institutions in R. Macedonia. Here, the rate of the return of average assets (ROA), the rate of the return of average equity and reserves (ROE) and net interest margin (NIM), are taken as basic indicators of the profitability.

<sup>3</sup> Dasgupta, D. (2001) Profitability of Indian Public Sector Banks in the light of liberalization of Indian Economy – An Overview, The Management Accountant

<sup>4</sup> Nadica Iloska, An Analysis of Bank Profitability in Macedonia, Journal of Applied Economics and Business

<sup>5</sup> Goddard, J., Molyneux, P. & Wilson, J. O. S. (2004). The profitability of European banks: a cross-sectional and dynamic panel analysis, Manchester School 72 (3), 363-381

<sup>6</sup> Songül KAKÝLLÝ ACARAVCI, Ahmet Ertuđrul ÇALIM (2013) *Turkish Banking Sector's Profitability Factors*,

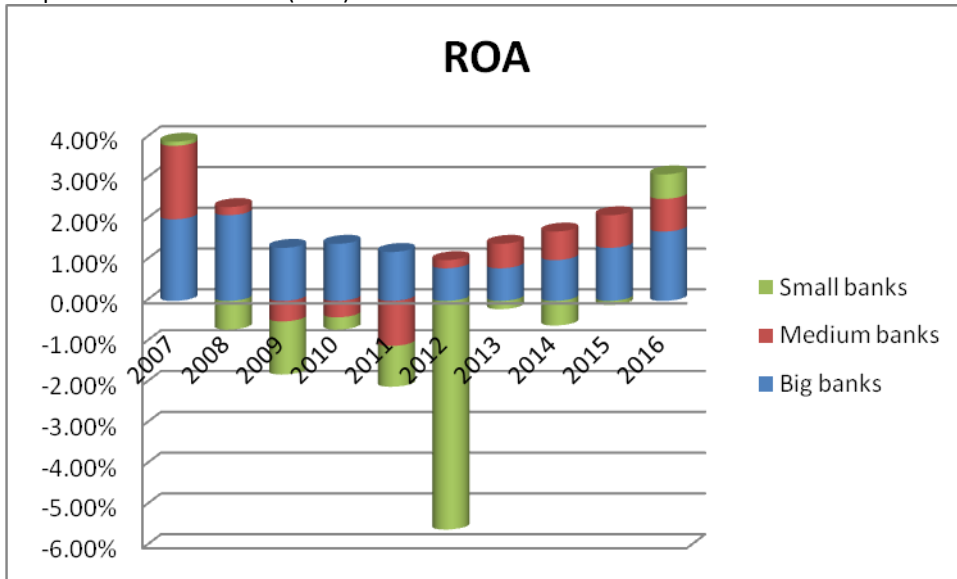
*International Journal of Economics and Financial Issues* Vol. 3, No. 1, pp. 27-41

<sup>7</sup> Goran Petrevski, *The Banks Managing*, University St. Kiril and Metodij, The Faculty of Economy, Skopje, 2001

<sup>8</sup> Determinants of Islamic Banking Profitability; M. Kabir Hassan and Abdel-Hameed M. Bashir (2003); Published by: EFR

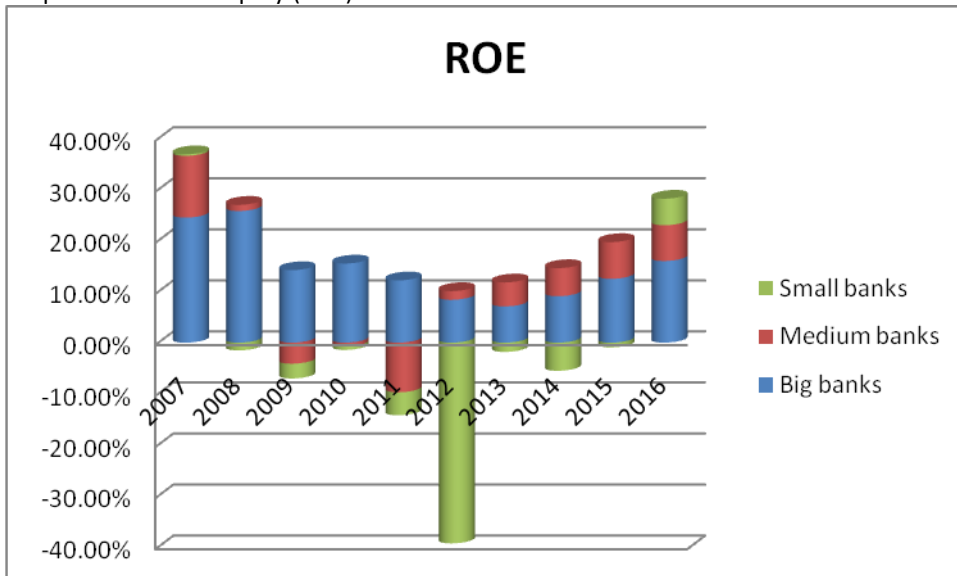
<sup>9</sup> Kosmidou, K. (2008). The determinants of banks' profits in Greece during the period of EU financial integration. *Managerial Finance* 34(3), 146-159.

Graph 1: Return of Assets (ROA)



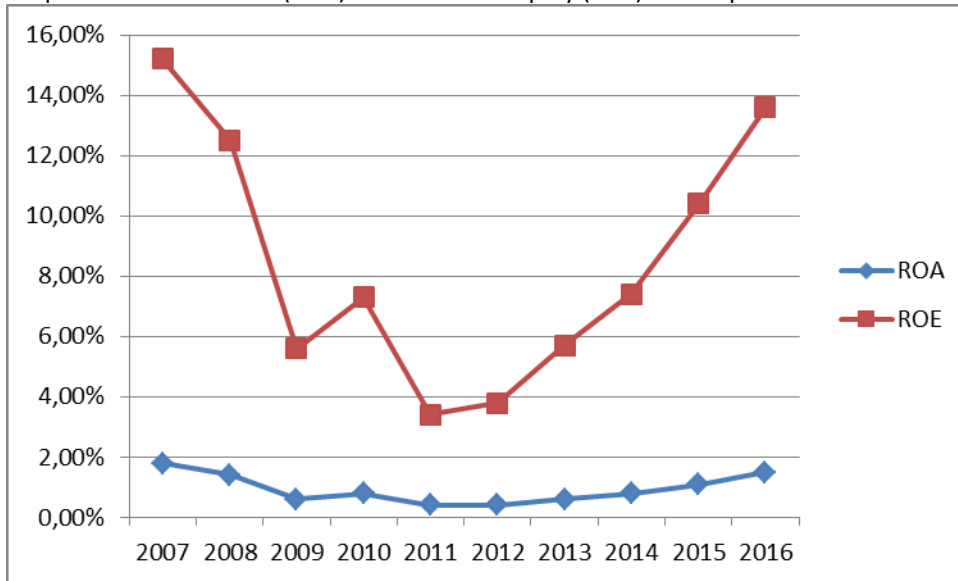
Source: authors' compilation based on the Data and Indicators of the Banking System of Republic of Macedonia, Indicators of the banks' profitability, NBRM

Graph 2: Return on equity (ROE)



Source: authors' compilation based on Indicators of the Banking System of Republic of Macedonia, Indicators of the banks' profitability, NBRM

Graph 3: Return of Assets (ROA) and Return of Equity (ROE) for the period 2007-2016



Source: authors' compilation

Based on the results shown in the previous graphs, it can be concluded that the banking institutions profitability from 2007 to 2011 is in a slight decreasing as a consequence of the negative influences of the world financial crisis, while in the period after 2011, a positive trend can be seen.

The rates of the return of average assets and average equity have seen continuing growth in the last several years, and for 2016 they are 13,6% and 1,5% respectively. The growth of these rates in the last three years is mainly due to the significant positive movements of the profit margin. Continuing growth of the profit margin has the highest influence on the ROAA and ROAE increasing. The analysis of the factors that have contributed to such a positive trend, has shown that it is about improved indicators of the profitability and efficiency of the banking system, as a consequence of the improved revenue and expenditure efficiency of the banks.

So, it can be concluded that the main carrier of the positive financial result are the big banks. Namely, 84% of the total financial result are concentrated with them. Moreover, it can be seen that the medium banks show positive tendencies of their profitability.

The exemption are the small banks, that have not created enough high and stable revenues yet, which will enable them positive financial result and long-term perspective for survival. Namely, the small banks are characterized by negative financial results, that in 2014 and 2015 showed positive

movements in respect of decreasing the negative result compared to that in the previous years. The reasons for such situation of the small banks is mainly due to the small market share of the small banks group in the banking system of RM (only 3,7%), continuing credit activity decreasing, decreased amount of deposits, and the decreased operating efficiency of these banks. Therefore, it is most possible that part of them will face a need for changing the business model or changing the working strategy. Just because of these reasons, one of the measures to be recommended in the future, is a concentration of the capital in the banking sector through a merger of the smaller banks.

Net interest income, represents the difference between interest earned on assets and interest paid on liabilities. Net interest margin (NIM) is net interest income expressed as a percentage of average interest-earning assets. Net interest margin is a measure of the difference between the interest income generated by banks or other financial institutions and the amount of interest paid out to their lenders (for example, deposits),

relative to the amount of their (interest-earning) assets.<sup>10</sup>

From banks' perspective, the net interest margin is an important determinant of their profitability, while from the real economy point of view, combined with the country risk, macroeconomic variables, client risk, competition, etc. it is one of

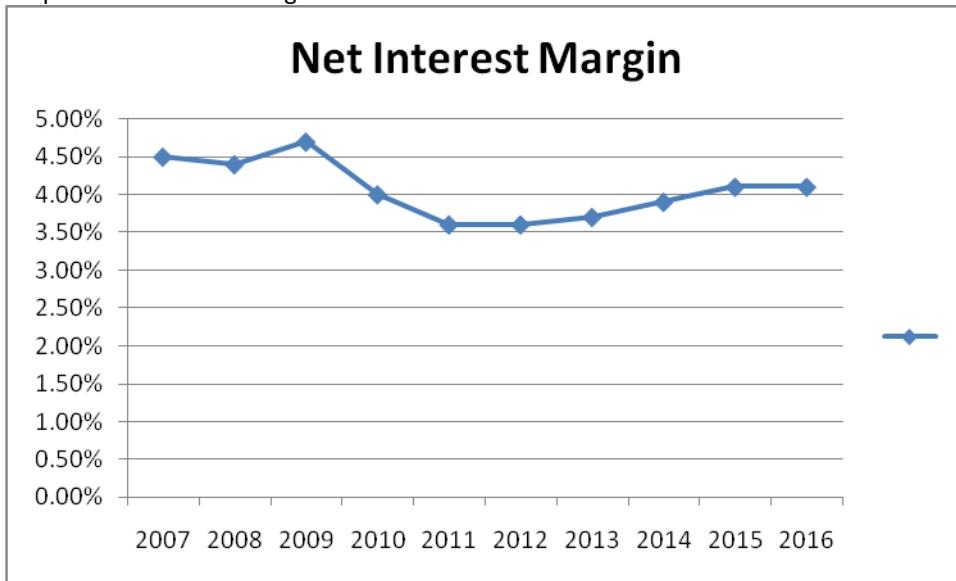
the key factors influencing the overall level of interest rates for the private sector. In bank-centric systems dominant in European emerging markets where bank loans are the main funding source, factors that affect loan availability also influence the stability of the whole banking sector.<sup>11</sup>

Table 3: Net interest margin (NIM)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Banking system	4,5%	4,4%	4,7%	4%	3,6%	3,6%	3,7%	3,9%	4,1%	4,1%

Source: Reports on the risks in the Banking System in Republic of Macedonia (2007-2016)

Graph 4: Net Interest Margin



Source: authors' compilation

In the previous graph it can be seen that for the period from 2009 to 2011, the net interest margin had negative trend, but it have positive movements from 2011 until 2016. The annual increasing of the net interest margin is a reflection of a more pronounced annual growth of the net interest revenue from the average interest-bearing assets growth. In fact, the main cause for the interest margin increase is the decreasing of the interest expenditures, which at the same time have contributed to an annual decrease of the expenditures from interests per interest-bearing liabilities unit.

As we have seen in the previous analyses, although the net-profit was significantly increased in 2016, the net interest margin remained unchanged, i.e. 4.1%. In fact, the net interest revenue growth ( as one of the components of a net interest margin) is a key driver of the financial result increasing ( participates by 61,6% into the growth of the net profit after taxation ), but it is compensated by the same (percentage) growth of the average interest assets. Therefore, the net interest revenues have solid growth of 7,2% (or 1.037 million denars), while the average interest assets are also increased by 7,2%.<sup>12</sup>

<sup>10</sup> The Relationship between Net Interest Margin and Return on Assets of Listed Banks in Ghana, Victor Curtis Lartey, Samuel Antwi, Eric Kofi Research Journal of Finance and Accounting ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.16, 2013

<sup>11</sup> Mirna Dumcic, Tomislav Ridzak, Determinants of Banks' net interest margins in Central and Eastern Europe, Financial Theory and Practice, 37(1), 2013

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#### **4. Conclusion**

On the basis of the performed analysis in this study, it can be concluded that the banking institutions profitability in R. Macedonia, measured by the indicators ROA, ROE and NIM, has shown a positive trend in the analyzed period, with an exception of the period up to 2011, when the consequences of the world financial crisis were still felt.

The analysis has shown that the main reason for the increased profit in the banking sector, are significantly decreased interest expenditures, that caused growth of the net interest revenue, and growth of the other regular revenues, as well. Namely, net interest revenue earned by the banks in the process of financial mediation, expressed through the net interest margin, has seen a continuing growth after 2011, which is enough for a higher improvement of the banking system total profitability.

The profitability indicators have been improved, and the operating ability of the banks for creating revenues that cover the expenditures of their work, has been increased, too. Besides the a.m. positive influence, there has been a decreased value adjustment of the credits on a net-base, due to the growth of the credits released value adjustment, which corresponds to the continuous decreasing of the annual growth rate of the non-functional credits.

In this context, it is indispensable do underline that the main carrier of the positive financial result in the banking system of R. Macedonia, are the bigger banks, where about 84% of the total financial result, are concentrated.

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